

Claims

[c1]

1. A display system, comprising:

(A) a virtual display device;

(B) a direct view display device;

(C) a beamsplitter/coupler receiving a first image from said virtual display device and a second image from said direct view display device; and

(D) an edge matching device blending said first image to said second image for a smooth and continuous scene.

[c2]

2. A display system, as recited in claim 1, wherein said virtual display device is an electronic flat screen display device.

[c3]

3. A display system, as recited in claim 1, wherein said virtual display device is a plasma flat screen display device.

[c4]

4. A display system, as recited in claim 3, wherein said edge matching device is a butt match of adjacent flat screen display devices.

[c5]

5. A display system, as recited in claim 1, wherein said edge matching device is an edge blending device blending the edges of adjacent display devices together.

[c6]

6. A display system, as recited in claim 1, wherein said virtual display device is selected from the group consisting of CRT monitors, rear projection screens, LCD light valves, plasma screens, CRT projectors, laser projectors and organic light emitting diodes.

[c7]

7. A display system, as recited in claim 1, wherein said direct view display device is an electronic flat screen display device.

[c8]

8. A display system, as recited in claim 1, wherein said direct view display device is a plasma flat screen display device.

[c9]

9. A display system, as recited in claim 1, wherein said direct view display device is selected from the group consisting of CRT monitors, rear projection screens, LCD light valves, CRT projectors, laser projectors and organic light emitting diodes.

[c10]

10. A display system, as recited in claim 1, wherein said beamsplitter/combiner further comprises an optical device, which further comprises a transmissive region and a reflective region.

[c11]

11. A display system, as recited in claim 1, wherein said beamsplitter/combiner further comprises an optical device which further comprises a curved transmissive and reflective device which comprises a material selected from the group consisting of glass, acrylic and polycarbonate.

[c12]

12. A display system, as recited in claim 1, wherein said beamsplitter/combiner further comprises a beamsplitter coating designed to provide about 50% transmission and 50% reflection characteristics across the visual spectrum.

[c13]

13. A display system, as recited in claim 1, further comprising a frame holding said direct view display device, said virtual display device and said beamsplitter/combiner about a user/trainee position.

[c14]

14. A display system, as recited in claim 13, wherein said frame further comprises a honeycomb structure backing plate and a plurality of spacers between said honeycomb structure backing plate and said beamsplitter/combiner device.

[c15]

15. A display system, as recited in claim 1, wherein said edge blending device further comprises a linearly light blocking silk screened vinyl mask fixed to an edge of said direct view display device.

[c16]

16. A display system, as recited in claim 1, wherein said edge blending device further comprises a linearly light blocking silk screened vinyl mask fixed to an edge of said virtual display device.

[c17]

17. A display system, as recited in claim 1, further comprises a light baffle preventing unwanted light from cross illuminating said display channels.

[c18]

18. A display system, as recited in claim 1, further comprising a second virtual display device.

[c19]

19. A display system, as recited in claim 1, further comprising a second direct view display device.

[c20]

20. A display system, as recited in claim 1, wherein said first image and said second image overlap each other.

[c21]

21. A display system, as recited in claim 1, wherein said first image and said second image are butt matched to each other.

[c22]

22. A display system, as recited in claim 1, further comprising a mosaic display alternating images from said virtual image display device and said direct view display device.

[c23]

23. A display system, as recited in claim 1, wherein said virtual display device and said direct view display device is orientated so as to provide independent geometric correct images to more than one individual in a cockpit.

[c24]

24. A display system, as recited in 17, wherein said baffle cooperates with said display devices to provided high contrast levels.

[c25]

25. A display system, as recited in claim 4, wherein said butt matching of said first and said second images are provided by the pixel precision of said displays.